

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION of
Inventor(s): Mills

App'n Ser. No.: 09/008,947

Filing Date: 01/20/1998



Group Art Unit: 1745

Examiner(s): Kalafut for
the Secret Committee

Title: HYDRIDE BATTERY AND FUEL CELL

* * * * May 13, 2005

NEW INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Attached are PTO/SB/O8B forms listing the enclosed documents. Copies of the enclosed documents are attached to the presently filed Information Disclosure Statement and/or to the Attachments to the Response filed herewith.

If necessary, please accept this Information Disclosure Statement under Rule 97(c) and charge the requisite Rule 17(p) fee to our Deposit Account No. 50-0687 under Order No. 62-226 for which purposes this paper is submitted in duplicate.

This Information Disclosure Statement is intended to fully comply with the rules, but should the Examiner find any part of its required content to have been omitted, prompt notice that effect is earnestly solicited, along with additional time under Rule 97(f), to enable Applicant to fully comply.

Consideration of the foregoing and enclosures, including return of a copy of the attached PTO/SB/08A and B forms with the Examiner's initials in the left column per MPEP § 609, and an early action on the merits of this application are earnestly solicited.

Respectfully submitted,
Manelli Denison & Selter PLLC

By

A handwritten signature in black ink, appearing to read "J. S. Melcher".

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Customer No. 20736

Substitute for form 1449B/PTO		Complete if Known	
		Application Number	09/008,947
		Filing Date	01/20/1998
		First Named Inventor	Mills
		Group Art Unit	1745
		Examiner Name	Kalafut
Sheet	1	9	Attorney Docket Number

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examinee r Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	58	R. L. Mills, "Classical Quantum Mechanics," Physics Essays, in press. (<i>Web Publication Date: May 23, 2002.</i>)	
	60	R. L. Mills, J. Sankar, A. Voigt, J. He, B. Dhandapani, "Synthesis of HDLC Films from Solid Carbon," Journal of Materials Science, in press. (<i>Web Publication Date: May 3, 2002.</i>)	
	77	J. Phillips, R. L. Mills, X. Chen, "Water Bath Calorimetric Study of Excess Heat in 'Resonance Transfer' Plasmas," J. Appl. Phys., Vol. 96, No. 6, (2004) 3095–3102. (<i>Web Publication Date: June 16, 2003.</i>)	
	80	R. L. Mills, "The Fallacy of Feynman's Argument on the Stability of the Hydrogen Atom According to Quantum Mechanics," Annales de la Fondation Louis de Broglie, submitted. (<i>Web Publication Date: Jan. 27, 2003.</i>)	
	81	R. Mills, P. Ray, B. Dhandapani, W. Good, P. Jansson, M. Nansteel, J. He, A. Voigt, "Spectroscopic and NMR Identification of Novel Hydride Ions in Fractional Quantum Energy States Formed by an Exothermic Reaction of Atomic Hydrogen with Certain Catalysts," European Physical Journal: Applied Physics, 28, (2004), 83–104. (<i>Web Publication Date: Feb. 21, 2003.</i>)	
	88	R. Mills, J. Sankar, A. Voigt, J. He, P. Ray, B. Dhandapani, "Role of Atomic Hydrogen Density and Energy in Low Power CVD Synthesis of Diamond Films," Thin Solid Films, 478, (2005) 77–90. (<i>Web Publication Date: Dec. 22, 2003.</i>)	
	94	R. L. Mills, "The Nature of the Chemical Bond Revisited and an Alternative Maxwellian Approach," Physics Essays, in press. (<i>Web Publication Date: Aug. 6, 2003.</i>)	
	96	J J. Phillips, C.K. Chen, R. L. Mills, "Evidence of the Production of Hot Hydrogen Atoms in RF Plasmas by Catalytic Reactions Between Hydrogen and Oxygen Species," Spectrochimica Acta Part B: Atomic Spectroscopy, submitted. (<i>Web Publication Date: Sept. 12, 2003.</i>)	
	97	R. L. Mills, P. Ray, B. Dhandapani, "Evidence of an Energy Transfer Reaction Between Atomic Hydrogen and Argon II or Helium II as the Source of Excessively Hot H Atoms in RF Plasmas," Journal of Plasma Physics, in press. (<i>Web Publication Date: Sept. 26, 2003.</i>)	
	98	R. L. Mills, Y. Lu, J. He, M. Nansteel, P. Ray, X. Chen, A. Voigt, B. Dhandapani, "Spectral Identification of New States of Hydrogen," New Journal of Chemistry, submitted. (<i>Web Publication Date: Nov. 18, 2003.</i>)	

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	100	R. Mills, B. Dhandapani, J. He, "Highly Stable Amorphous Silicon Hydride from a Helium Plasma Reaction," Materials Chemistry and Physics, submitted. (<i>Web Publication Date: Nov. 17, 2003.</i>)			T ²
	102	R. L. Mills, "Exact Classical Quantum Mechanical Solutions for One- through Twenty-Electron Atoms," Phys. Essays, submitted. (<i>Web Publication Date: April 22, 2004.</i>)			
	103	R. L. Mills, Dhandapani, W. Good, J. He, "New States of Hydrogen Isolated from K ₂ CO ₃ Electrolysis Gases," Electrochim. Acta, submitted. (<i>Web Publication Date: April 28, 2004.</i>)			
	104	R. L. Mills, Y. Lu, M. Nansteel, J. He, A. Voigt, W. Good, B. Dhandapani, "Energetic Catalyst-Hydrogen Plasma Reaction as a Potential New Energy Source," Division of Fuel Chemistry, Session: Advances in Hydrogen Energy, 228th American Chemical Society National Meeting, August 22–26, 2004, Philadelphia, PA.			

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	105	J. Phillips, C. K. Chen, R. L. Mills, "Evidence of Catalytic Production of Hot Hydrogen in RF-Generated Hydrogen/Argon Plasmas," IEEE Transactions on Plasma Science, submitted. (<i>Web Publication Date: September 7, 2004.</i>)	
	106	R. L. Mills, "Exact Classical Quantum Mechanical Solution for Atomic Helium which Predicts Conjugate Parameters from a Unique Solution for the First Time," Foundations of Science, submitted. (<i>Web Publication Date: October 28, 2004.</i>)	
	107	R. L. Mills, "Maxwell's Equations and QED: Which is Fact and Which is Fiction," Physica Scripta, submitted. (<i>Web Publication Date: October 28, 2004.</i>)	
	108	. R. L. Mills, J. He, M. Nansteel, B. Dhandapani, "Catalysis of Atomic Hydrogen to New Hydrides as a New Power Source," International Journal of Global Energy Issues (IJGEI). Special Edition in Energy System, submitted. (<i>Web Publication Date: April 4, 2005.</i>)	
	109	R. L. Mills, M. Nansteel, J. He, B. Dhandapani, "Low-Voltage EUV and Visible Light Source Due to Catalysis of Atomic Hydrogen," J. Plasma Physics, submitted. (<i>Web Publication Date: April 15, 2005.</i>)	
	110	R. L. Mills, J. He, Z. Chang, W. Good, Y. Lu, B. Dhandapani, "Catalysis of Atomic Hydrogen to Novel Hydrides as a New Power Source," Prepr. Pap.—Am. Chem. Soc., Div. Fuel Chem. 2005, 50(2). (<i>Web Publication Date: April 22, 2005.</i>)	
	S	Souw, Bernard, "Coherent Telescope array with self-homodyne interferometric detection for optical communications," Opt. Eng. 42(11) 3139-3157 (Nov. 2003); U.S. Department of Commerce, Summary of Ethics Rules, USPTO, 2000; October 15, 2004 E-mail to Examiner Wayner (Attachment S)	

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		CRITCHLEY <i>et al.</i> , "Energy shifts and forbidden transitions in H ₂ due to electronic g/u symmetry breaking", <i>Molecular Physics</i> , 2003, Vol. 101, Nos. 4-5, pp. 651-661, Taylor & Francis Ltd.			
		GAMBUS <i>et al.</i> , "Spectroscopic Study or Low-Pressure Water Plasmas and Their Reactions with Liquid Hydrocarbons", <i>Energy & Fuels</i> , 2002, 16, pp. 172-176, American Chemical Society			
		CVETANOVIC <i>et al.</i> , "Excessive Balmer line broadening in a plane cathode abnormal glow discharge in hydrogen", <i>Journal of Applied Physics</i> , 97, 033302 (2005), American Institute of Physics			
		AKATSUKA <i>et al.</i> , "Stationary population inversion of hydrogen in an arc-heated magnetically trapped expanding hydrogen-helium plasma jet", <i>Physical Review E</i> , 49, 2, pp. 1534-1544, February, 1994, The American Physical Society			
		MURAKAMI <i>et al.</i> , "Chemisorption of hydrogen into a graphite-potassium intercalation compound C ₈ K studied by means of positron annihilation", <i>J. Chem. Phys.</i> , 62 (10), May 15, 1995, American Institute of Physics			
		AHN, "Hydrogen Storage in Metal-Modified Single-Walled Carbon Nanotubes", Division of Engineering and Applied Science, California Institute of Technology, September 15, 2001			
		DUAN <i>et al.</i> , "Numerical calculation of energies of some excited states in a helium atom", <i>Eur. Phys. J.</i> , D 19, (2002), pp. 9-12, Societa Italiana di Fisica, Springer-Verlag 2002			
		NIXON <i>et al.</i> , "Formation and structure of the potassium graphites", <i>Brit. J. Appl. Phys.</i> , Ser. 2, Vol., 1, pp. 291-299, Great Britain, 2002			
		ZELLINGER, "Experiment and the foundations of quantum physics", <i>Reviews of Modern Physics</i> , Vol 71, No. 2, pp. S288-S297, Centenary 1999, The American Physical Society			

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<p>Substitute for form 1449B/PTO</p> <p style="text-align: center;">INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p>(use as many sheets as necessary)</p>				Complete if Known	
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		COTTON <i>et al.</i> , "Complexes of Cyclic 2-Oxacarbenes, I. A Spontaneous Cyclization to Form a Complex of 2-Oxacyclopentylidene", <i>Journal of the American Chemical Society</i> , 93:11, pp. 2672-2676, June 2, 1971			
		LINDSAY <i>et al.</i> , "A remeasurement of the 2.4μm spectrum of J = H ₂ pairs in a parahydrogen crystal", <i>Journal of Molecular Spectroscopy</i> , 218. Pp. 131-133, 2003			
		JUAREZ <i>et al.</i> , "Photoelectron angular distributions of rotationally resolved states in para-H ₂ ⁺ : A closer to the dynamics of molecular photoionisation", The University of Manchester Atomic, Molecular & Laser Manipulation Group, pp.1-5			
		WEISSTEIN, "Ortho-Para Hydrogen", http://scienceworld.wolfram.com/physics/Ortho-ParaHydrogen.html			
		SMITH, "Infrared spectra of BO ₂ ⁻ in the alkali halides-L. Potassium and rubidium halides", <i>Spectrochimica Acta</i> , Vol. 30A, pp. 875-882, Pergamon Press, 1974			
		LEITCH <i>et al.</i> , "Raman Specroscopy of Hydrogen Molecules in Crystalline Silicon", <i>Physical Review Letters</i> , 81:2, pp. 421-424, July 13, 1998, The American Physical Society			
		CHEN <i>et al.</i> , "Key to Understanding Interstitial H ₂ in Si", <i>Physical Review Letters</i> , 88:10, pp. 105507-1 - 105507-4, March 11, 2002, The American Physical Society			
		CHEN <i>et al.</i> , "Rotation of Molecular Hydrogen in Si: Unambiguous Identification of Ortho-H ₂ and Para-D ₂ ", <i>Physical Review Letters</i> , 88:24, pp. 245503-1 - 245503-4, June 17, 2002, The American Physical Society			
		LAVROV <i>et al.</i> , "Ortho and Para Interstitial H ₂ in Silicon", <i>Physical Review Letters</i> , 89:21, pp. 215501-1 - 215501-4, November 18, 2002, The American Physical Society			
		STAVOLA <i>et al.</i> , "Interstitial H ₂ in Si: are all problems solved?", <i>Physica B</i> , pp. 58-66, 200s Elsevier B.V.			

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		MILLS et al., "Catalysis of Atomic Hydrogen to Novel Hydrides as a New Power Source", pp. 1-8, BlackLight Power, Inc.			
		DECIUS et al., "Force Constants of the Metaborate Ion in Alkali Halides", <i>The Journal of Chemical Physics</i> , 56:10, pp. 5189-5190, May 15, 1972			
		"Infrared spectra of the metaborate ion in alkali halide solid solution", <i>Research Notes</i> , pp. 600-602			
		SMITH, "Anharmonic force field of the metaborate ion in alkali halides", <i>The Journal of Chemical physics</i> , 58:11, pp. 4776-4778, June 1, 1973			
		HISATSUNE et al., "Infrared Spectra of Metaborate Monomer and Trimer Ions", <i>Inorganic Chemistry</i> , pp. 168-174			
		JONES et al., "Force Constants of Nickel Carbonyl from Vibrational Spectra of Isotopic Species", <i>The Journal of Chemical Physics</i> , 48:6, pp. 2663-2670, March 15, 1968			
		SMITH, "Infrared spectra of BO ₂ -in the alkali halides-I. Potassium and rubidium halides", <i>Spectrochimica Acta</i> , 30A, pp. 875-882, 1974, Pergamon Press			
		SCHOENFELDER et al., "Kinetics of Thermal Decomposition of TiH ₂ ", <i>J. Vac. Sci. Technol.</i> , 10:5, pp. 862-870, Sept./Oct. 1973			
		"Emission Characteristics for Scandium Type Dispenser Cathodes", HeatWave Labs, Inc., TB-119, May 24, 2001, Spectra-Mat, Inc.			
		"Emission Characteristics of 'M Type' Dispenser Cathodes", HeatWave Labs, Inc., TB-117, May 24, 2001, Spectra-Mat, Inc.			
		"Practical Aspects of Modern Dispenser Cathodes", <i>Microwave Journal</i> , September, 1979			

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		"Standard Series Barium Tungsten Dispenser Cathodes", HeatWave Labs, Inc., TB-198, July 29, 2002, Spectra-Mat, Inc.	
		ABATE <i>et al.</i> , "Optimization and enhancement of H ⁺ ions in a magnetized sheet plasma", <i>Review of Scientific Instruments</i> , 71:10, pp. 3689-3695, October 2000, American Institute of Physics	
		CHABERT <i>et al.</i> , "On the influence of the gas velocity on dissociation degree and gas temperature in a flowing microwave hydrogen discharge", <i>Journal of Applied Physics</i> , 84:1, pp. 161-167, July 1, 1009, American Institute of Physics	
		GORDON <i>et al.</i> , "Energy coupling efficiency of a hydrogen microwave plasma reactor", <i>Journal of Applied Physics</i> , 89:3, pp. 1544-1549, February 1, 2001, American Institute of Physics	
		RADOVANOV <i>et al.</i> , "Time-resolved Balmer-alpha emission from fast hydrogen atoms in low pressure, radio-frequency discharges in hydrogen", <i>Appl. Phys. Lett.</i> , 66:20, pp. 2637-2639, May 15, 2995	
		DJUROVIC <i>et al.</i> , "Hydrogen Balmer alpha line shapes for hydrogen-argon mixtures in a low-pressure rf discharge", <i>J. Appl. Phys.</i> , 74:11, pp. 6558-6565, December 1, 1993, American Institute of Physics	
		KONJEVIC, "Plasma Broadening and Shifting of Non-Hydrogenic Spectral Lines: Present Status and Applications", <i>Physics Reports</i> , 315, pp. 339-401, 1999, Elsevier	
		BENESCH <i>et al.</i> , "Line shapes of atomic hydrogen in hollow-cathode discharges", <i>Optics Letters</i> , 9:8, pp. 338-340, August 1984, Optical Society of America	
		AYERS, <i>et al.</i> , "Shapes of atomic-hydrogen lines produced at a cathode surface", <i>Physical Review A</i> , 37:1, pp. 194-200, January 1, 1988, The American Physical Society	
		ADAMOV, <i>et al.</i> , "Doppler Spectroscopy of Hydrogen and Deuterium Balmer Alpha Line in an Abnormal Glow Discharge", <i>IEEE Transactions on Plasma Science</i> , 31:3, pp. 444-454, June 3, 2003	
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		JOVICEVIC <i>et al.</i> , "Excessive Balmer line broadcasting in microwave-induced discharges", <i>Journal of Applied Physics</i> , 95:1, pp. 24-29, January 1, 2004, American Institute of Physics	
		DJUROVIC <i>et al.</i> , "Hydrogen Balmer alpha line shapes for hydrogen-argon mixtures in a low-pressure rf discharge", <i>J. Appl. Phys.</i> , 74:11, pp. 6558-6565, December 1, 1993, American Institute of Physics	
		MAYO, "Thermalization and Energy Distribution in Cold Laboratory Plasmas Comments on the Possibility of Mono-Energetic Species", April 20, 2004	
		VIDENOVIC <i>et al.</i> , "Spectroscopic investigations of a cathode fall region of the Grimm-type glow discharge", <i>Spectrochimica Acta Part B</i> , 51, pp. 1707-1731, 1996	
		BARBEAU <i>et al.</i> , "Spectroscopic investigation of energetic atoms in a DC hydrogen flow discharge, pp. 1168-1174, 1990 IOP Publishing Ltd.	
		KONJEVIC <i>et al.</i> , "Emission Spectroscopy of the Cathode Fall Region of an Analytical Glow", <i>J. Phys. IV France</i> , 7, pp. C4-247-C4-258, October 1997	
		LIFSHITZ <i>et al.</i> , "Resonance absorption measurements of atom concentrations in reacting gas mixtures. I. Shapes of H and D Lyman- α lines from microwave sources", <i>J. Chem. Phys.</i> , 70:12, pp. 5607-5613, June 15, 1979, American Institute of Physics	
		KURAICA <i>et al.</i> , "Line shapes of atomic hydrogen in a plane--cathode abnormal glow discharge", <i>Physical Review A</i> , 46:7, pp. 4429-4432, October 1, 1992, The American Physical Society	
		KURAICA <i>et al.</i> , "On the Atomic Hydrogen Line Shapes in a Plane-Cathode Obstructed Glow Discharge", <i>Physica Scripta.</i> , 50, pp. 487-492, 1994	

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		OLTHOFF <i>et al.</i> , "Studies of Ion Kinetic-Energy Distributions in the Gaseous Electronics Conference RF Reference Cell", <i>Journal of Research of the National Institute of Standards and Technology</i> , 100:4, pp. 383-400, July-August 1995	
		RADOVANOV <i>et al.</i> , "Ion kinetic-energy distributions and Balmer-alpha (H_{α}) excitation in Ar-H ₂ radio-frequency discharges", <i>J. Appl. Phys.</i> , 78:2, pp. 746-756, July 15, 1995	
		DJUROVIC <i>et al.</i> , "Hydrogen Balmer alpha line shapes for hydrogen-argon mixtures in a low-pressure rf discharge", <i>J. Appl. Phys.</i> , 74:11, pp. 6558-6565, December 1, 1993, American institute of Physics	
		ALEXEFF <i>et al.</i> , "Collisionless Ion-Wave Propagation and the Determination of the Compressions Coefficient of Plasma Electrons", <i>Physical Review Letters</i> , 15:7, pp. 286-288, August 16, 1999	
		ARATA <i>et al.</i> , "Reproducible 'Cold' Fusion Reaction Using a Complex Cathode", <i>Fusion Technology</i> , 22, pp. 287-295, September 1992	
		BURKHOLDER <i>et al.</i> , "Reactions of boron atoms with molecular oxygen. Infrared spectra of BO, BO ₂ , B ₂ O ₂ , B ₂ O ₃ , and BO ₂ in solid argon", <i>J. Chem. Phys.</i> , 95:12, pp. 8697-8709, December 15, 1991	
		SPURGIN, "Direct Conversion of the Random Thermal Energy of a Plasma Into Electrical Energy", Master's Thesis, The University of South Florida, June 1972	

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